



Protect your converged infrastructure properly and ensure continuity of your entire business

Get the best from converged infrastructure

Converged infrastructure is rapidly gaining popularity because it allows IT managers to reconfigure and expand their operations quickly, easily and cost effectively. But to get the best from converged infrastructure, it's essential to make the right choices about the chosen power management system, which supports the converged solution and therefore ensures continuity of the entire business.

What is converged infrastructure?

The term converged infrastructure describes an IT solution that brings together server, storage, networking and virtualisation software in a convenient pre-integrated and centrally managed 'building block'. The main goal of the converged infrastructure solution is to minimise compatibility issues and simplify the management of IT devices while reducing costs for cabling, cooling, power and floor space. One of the big benefits is also that when the time comes to expand IT capacity, all that's needed is to add more of these building blocks, which is fast and straightforward.

The building blocks on their own, however, are not a complete solution. IT architecture itself, even if it's highly integrated, is still not able to guarantee continuity of the entire business.

IT devices are sensitive equipment and can be affected by many different factors, including power problems in the mains. Therefore, serious consideration should be given to ensure that the entire IT stack continues working seamlessly and that no data is lost when power problems do indeed occur.

Also, it is worth bearing in mind that in the event of a power failure converged infrastructure solutions are not able to protect themselves or the data stored on them, so it is crucial to think about a power management solution which is highly compatible with converged infrastructures to help protect and manage IT equipment during these events. This in turn will enhance uptime and ensure business continuity.

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Powering Converged Infrastructure

What is the best solution for housing and powering converged infrastructure?

While it would be perfectly possible to put together housing and power solutions based on products from several different suppliers, this raises all sorts of issues, such as ensuring that the products are fully compatible, and deciding which supplier is responsible if there should be problems. This ad-hoc approach also negates the main benefits of converged infrastructure, which depends on adopting an integrated and centrally managed approach. By far the best way to house and power converged infrastructure is, therefore, to look for an integrated power management system that has been developed specifically for this application. Additionally, the best power management systems are also approved by manufacturers of the leading converged and hyper-converged infrastructures.

Integrated power management systems and why you should use them

An integrated power management system usually incorporates power backup, distribution and housing, complemented by virtualisation-ready power management software and ongoing support services.

As many businesses are now data driven, the main goal of such a system is to guarantee uninterrupted operation of the converged infrastructure solution and maximise continuity of the entire business. This can be achieved through an advanced power management function, which triggers automatic, live migration of virtual machines to the backup site or the cloud, initiates data replication in case of power events and helps recover business from the backup site or the cloud when the power comes back – all things which virtualisation software cannot instigate on its own.

Good power management software can also be easily integrated into leading virtual machine management systems, which offers the user easy visibility of the entire converged infrastructure solution through a single pane. In other words, all UPSs and rack-based power distribution units in the virtual network can be viewed and managed from the same virtualisation dashboard, together with network, servers and storage devices. This eliminates the need for IT managers to run separate software in order to manage all their power devices seamlessly, saving time and reducing workload.

The power management system also helps reduce energy consumption of the converged infrastructure solution through outlet level metering. It tracks orphan servers, servers with enough capacity to move virtual machines, and overloaded servers where virtual machines must be removed from in order to avoid catastrophic failures.

High efficiency UPSs, an essential part of a good power management system, also help minimise power consumption of the entire converged system, thus generating savings.

A good power management system also provides a reliable and safe housing environment for business critical IT equipment. However, the role of a rack is not only to provide solid physical protection for the IT equipment mounted in it, a good one also provides excellent airflow management. This cuts cooling costs and eliminates hotspots that can potentially reduce the life of the rack-mounted equipment.

Converged infrastructure is the ideal partner for virtualised architecture and together they provide IT solutions that are flexible, dependable and economical. When building your converged infrastructure solution however, ensure that you use the best in class power management system to help you save time, money and minimise business risks.

As Professor Wattson says, "Only with the right power management system you can ensure your business and your converged infrastructure solution keeps working 365!"

